

dissolved above into a level-topped cyme of branches; their height, exclusive of the spores which easily fall off, is 125—150 μ .

Synthetospora gen. nov.—Hyphæ procumbent, branched, intricate, sending out short lateral fertile branchlets, which produce the spores at the apex; spores lobed, each consisting of a large opaque central cell with several smaller hyaline cells sunk part way into its surface. The genus is a compound Mycogone.

S. electa n. sp.—Effused, thin, flocculose, white, becoming yellowish and pulverulent; hyphæ long, creeping, very slender, hyaline, scarcely septate, branched and loosely interwoven; the lateral fertile branchlets abundant, short, ascending, each terminated by a single spore; spores normally 6-lobate composed of a central globose cell, with a smaller spherical cell at the base, another at the apex, and four cells laterally on the circumference; the spores are 20—30 μ in extent, being usually a little longer from base to apex, the smaller hyaline cells measure 10—12 μ in diameter and project half way or a little more.

Growing on the hymenial surface of some *Peziza*, presumably *P. semitosta* B. & C. The habit and habitat are that of a Mycogone, but the double spore of the latter is greatly amplified. The hyphæ are quite slender, about 3 μ in thickness. The hyaline basal cell by which the spore is attached to the thread is sometimes drawn out to nearly conical; the symmetry of the spores is occasionally interfered with by the interposition of a fifth lateral cell.

Preston, O.

BRIEFER ARTICLES.

The chemical composition of the nectar of the Poinsettia.—The nectaries of *Poinsettia pulcherrima* are strongly developed and secrete so abundantly that the nectar drips away from the organs. From some specimens growing in the college green-house, a considerable quantity of the nectar was secured in very pure condition, by means of a fine pointed camels-hair pencil. It was a clear, colorless sirup, very sweet and becoming sticky on drying.

The total amount collected was 3.383 grams which, after standing some weeks over sulphuric acid, was reduced in weight to 2.3353

grams, or 69.02 per cent. of the original amount. This may be regarded as representing the solids of the nectar. It was transparent and non-crystalline. On being dissolved in water it showed a strongly reducing action toward Fehling's solution, indicating the presence of glucose sugars. In the polariscope a specific rotation of $+13.7^\circ$ was noted, which after inversion became -10.8° showing the presence of cane sugar. From the polariscope data were calculated 11.23 per cent. cane sugar and 57.7 per cent. glucose.

The small amount of material prevented a more extended examination. The composition is expressed very closely by these percentages: water, 30.98; cane sugar, 11.23; glucose, 57.79.

In this connection a late paper by P. C. Plugge (Archiv der Pharmacie 229, 554) is of interest. Searching for the cause for Xenophon's reference to poisonous honey, he examined the nectar of *Rhododendron pontica* and found that it had a poisonous effect upon small animals. It was not ascertained if bees were harmed by it or not. The poisonous principle was isolated and called *andrometoxin*; it was also found in the nectar of several other Ericaceæ, the honey from which would undoubtedly be poisonous.—W. E. STONE, *Purdue University, La Fayette, Ind.*

Notes on *Asclepias glaucescens* and *A. elata*.—Dr. Palmer has just sent in from Colima, Mexico, the true *Asclepias glaucescens* HBK., which necessitates a change of name in our United States species. *A. glaucescens* was described and figured in Nov. Gen. et Spec. vol. III. p. 190, t. 223, from plants collected between Acapulco and La Venta de la Moxonera. Dr. Gray, in Syn. Flora vol. II. 92, refers the *A. Sullivantii* Torrey Bot. Mex. Bound. p. 162, to this species. The United States species, however, is clearly distinct from *A. glaucescens* and should be referred to *A. elata* Benth. Dr. Gray, however, in the Syn. Flora, Suppl. p. 401, considered the two the same species, but in the light of this new material I am convinced we have two good species although closely related. *A. elata* has oblong or oval leaves, rounded at the apex very like *A. obtusifolia*. *A. glaucescens* has much longer and narrower leaves, oblong to linear-oblong and acute. The flowers are much larger in *A. elata* and the hoods are spreading, exposing the gynostegium; in *A. glaucescens* the hoods are longer instead of shorter than the gynostegium and erect and connivent; there is also a good character in the horns. Dr. Gray describes the form as it is in *A. elata* (under *A. glaucescens* in Syn. Flora) where, in speaking of the hood, he says "the whole length within occupied by a broad and thin crest, which is 2-lobed at the summit, the outer lobe